

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-3 (Cancelled)

4. (Original) A mounting table, comprising:

a heating unit including a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, wherein a carbon wire which generates heat when a current is applied thereto is inserted in the quartz tube; and

a mounting table cover member installed to cover the whole quartz tube of the heating unit, a target object being mounted thereon, wherein the mounting table cover member is made of a light absorbing material.

5. (Original) The mounting table of claim 4, wherein the mounting table cover member is made of SiC.

6. (Original) A heat treatment apparatus, comprising:

a mounting table including a heating unit having a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, wherein a carbon wire which generates heat when a current is applied thereto is inserted in the quartz tube; and a mounting table cover member installed to cover the whole quartz tube of the heating unit, a target object being mounted thereon, wherein the mounting table cover member is made of a light absorbing material;

a processing chamber accommodating therein the mounting table;

a gas supply unit for supplying a gas in the processing chamber; and

a vacuum pumping system for evacuating the processing chamber.

7. (Previously Presented) The heat treatment apparatus of claim 6, wherein the quartz tube is bent.

8. (Previously Presented) The heat treatment apparatus of claim 6, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

9. (Original) A heat treatment apparatus, comprising:
a mounting table on which a target object is mounted;
a processing chamber accommodating therein the mounting table;
a gas supply unit for supplying a gas in the processing chamber;
a vacuum pumping system for evacuating the inside of the processing chamber;
a target object heating unit for heating the target object;
an inner vessel installed in the processing chamber;
a heating unit, installed between the inner vessel and an inner wall of the processing chamber, for heating the inner vessel,
wherein the inner vessel is made of a light absorbing material, and
the heating unit includes a reflector plate made of an opaque quartz, and a quartz tube welded to a surface of the reflector plate, a carbon wire which generates heat when a current is applied thereto being inserted in the quartz tube.

10. (Original) The heat treatment apparatus of claim 9, wherein the inner vessel is made of SiC.

11. (Previously Presented) The heat treatment apparatus of claim 9, wherein the target object heating unit is integrally embedded in the mounting table.

12. (Previously Presented) The heat treatment apparatus of claim 9, wherein the quartz tube is bent.

13. (Previously Presented) The heat treatment apparatus of claim 9, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

14. (Previously Presented) The mounting table of claim 4, wherein the quartz tube is bent.

15. (Previously Presented) The mounting table of claim 4, wherein the quartz tube is divided and welded to a plurality of zones on the surface of the reflector plate.

16. (New) The mounting table of claim 4, wherein a positioning projection is provided in an upper direction at a peripheral region of the reflector plate and positions the mounting table cover member which is inserted by the positioning projection.

17. (New) The mounting table of claim 4, further comprising joint pins, wherein the quartz tube is jointed to the surface of the reflector plate by the joint pins.

18. (New) The mounting table of claim 4, wherein a lower half portion of the quartz tube is opaque quartz, and an upper half portion of the quartz tube is transparent quartz.

19. (New) The heat treatment apparatus of claim 9, wherein the reflector plate is attached to a ceiling plate of the processing chamber.

20. (New) The heat treatment apparatus of claim 19, wherein an upper half portion of the quartz tube is opaque quartz, and a lower half portion is transparent quartz.

21. (New) The heat treatment apparatus of claim 9, further comprising joint pins, wherein the quartz tube is jointed to the surface of the reflector plate by the joint pins.